

WHAT IS CLAIMED IS:

1. A cyclone dust collecting device for a vacuum cleaner, comprising:
a cyclone body for connection to a telescopic extension pipe of the vacuum
cleaner, the cyclone body generating a swirling vortex from an inflow of air and
contaminants; and

a cyclone housing detachably engaged with the cyclone body, the cyclone
housing having a slanted partition with a through-hole formed therein, the slanted
partition dividing an interior of the cyclone housing into an upper space for separating
the contaminants from the air by guiding the swirling vortex of air and a lower space
for receiving the contaminants that have been separated from the air.

2. The cyclone dust collecting device as claimed in claim 1, wherein the cyclone
housing comprises;

a cyclone cover having a cylindrical shape, an open upper end, and a lower
closed end, the open upper end being engaged with the cyclone body, the lower closed
end being closed by the slanted partition; and

a dust collecting container detachably engaged with a lower portion of the
cyclone cover, the dust collecting container having an open end that is slanted to
correspond with the slanted partition of the cyclone cover.

3. The cyclone dust collecting device as claimed in claim 2, wherein the dust
collecting container comprises a closed end which is slanted to correspond to the slanted
partition.

4. The cyclone dust collecting device as claimed in claim 1, wherein the slanted
partition includes a dome-shaped protrusion formed on a center thereof.

5. The cyclone dust collecting device as claimed in claim 1, further comprising supporting means for supporting the cyclone housing with respect to the telescopic extension pipe and preventing separation of the cyclone housing from the cyclone body.

6. The cyclone dust collecting device as claimed in claim 5, wherein the supporting means comprises:

a fixture member mounted to the telescopic extension pipe;

an insertion member movably disposed on the fixture member, the insertion member being received in a recess formed in a lower end of the cyclone housing, when the cyclone housing is coupled to the cyclone body; and

an elastic member for biasing the insertion member into engagement with the recess.

7. The cyclone dust collecting device as claimed in claim 1, wherein the cyclone housing comprises:

a cyclone cover having a cylindrical shape, an open upper end, and a lower end, the open upper end being engaged with the cyclone body, the lower end being slant with respect to the slanted partition at a predetermined angle; and

a dust collecting container having an open end engaged with a lower portion of the cyclone cover by a screw, the dust collecting container receiving the contaminants that have passed through the through-hole of the slanted partition.

8. A vacuum cleaner comprising:

a cleaner body;

a telescopic extension pipe coupled to the cleaner body via a flexible hose;

a cyclone dust collecting device mounted to the telescopic extension pipe, the cyclone dust collecting device including:

a cyclone body mounted on the telescopic extension pipe, the cyclone body generating a swirling vortex from an inflow of air and contaminants; and

a cyclone housing detachably engaged with the cyclone body, the cyclone housing having a slanted partition with a through-hole formed therein, the slanted partition dividing an interior of the cyclone housing into an upper space for separating the contaminants from the air by guiding the swirling vortex of air and a lower space for receiving the contaminants that have been separated from the air

9. The vacuum cleaner as claimed in claim 8, wherein the cyclone housing comprises;

a cyclone cover having a cylindrical shape, an open upper end, and a lower closed end, the open upper end being engaged with the cyclone body, the lower closed end being closed by the slanted partition; and

a dust collecting container detachably engaged with a lower portion of the cyclone cover, the dust collecting container having an open end that is slanted to correspond with the slanted partition of the cyclone cover.

10. The vacuum cleaner as claimed in claim 9, wherein the dust collecting container comprises a closed end which is slanted to correspond to the slanted partition.

11. The vacuum cleaner as claimed in claim 8, wherein the slanted partition includes a dome-shaped protrusion formed on a center thereof.

12. The vacuum cleaner as claimed in claim 8, further comprising supporting means for supporting the cyclone housing on the telescopic extension pipe and preventing separation of the cyclone housing from the cyclone body.

13. The vacuum cleaner as claimed in claim 6, wherein the supporting means comprises:

a fixture member mounted to the telescopic extension pipe;

an insertion member movably disposed on the fixture member, the insertion member being received in a recess formed in a lower end of the cyclone housing, when the cyclone housing is coupled to the cyclone body; and

an elastic member for biasing the insertion member into engagement with the recess.

14. The cyclone dust collecting device as claimed in claim 8, wherein the cyclone housing comprises:

a cyclone cover having a cylindrical shape, an open upper end, and a lower end, the open upper end being engaged with the cyclone body, the lower end being slant with respect to the slanted partition at a predetermined angle; and

a dust collecting container having an open end engaged with a lower portion of the cyclone cover by a screw, the dust collecting container receiving the contaminants that have passed through the through-hole of the slanted partition.